



US ARMY Corps  
Of Engineers®  
Little Rock District

# JOINT PUBLIC NOTICE

CORPS OF ENGINEERS – STATE OF MISSOURI

Application Number: SWL 2013-00260

Date: April 15, 2014

Comments Due: May 6, 2014

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TO WHOM IT MAY CONCERN: **Comments are invited on the work described below.**  
**Please see the Public Involvement section for details on submitting comments.**

Point of Contact. If additional information is desired, please contact the project manager, Mr. Louis Clarke, telephone number: (870) 886-3610, mailing address: Little Rock District Corps of Engineers, Walnut Ridge Regulatory Field Office, PO Box 865, Walnut Ridge, Arkansas 72476-0865; email address: [Louis.E.Clarke@usace.army.mil](mailto:Louis.E.Clarke@usace.army.mil).

Project Information. Pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344), notice is hereby given that

**The Doe Run Resources Corporation d/b/a Doe Run**  
**ATTN: Mr. Mark Cummings**  
**PO Box 500**  
**Viburnum, Missouri 65566**

has requested authorization for the placement of dredged and fill material in waters of the United States associated with the construction of a new mine tailings impoundment. The proposed project is located in 25,111 linear feet of Lick Creek and tributaries, in sections 13, 14, 23, 24, and 26, T. 33 N., R. 2 W., northeast of Bunker, Reynolds County, Missouri.

The basic purpose of the project is to contain lead mine tailings. The overall purpose of the project is to store lead mine tailings near the Brushy Creek Lead Mine to support future mining and milling operations based on known ore reserves. The project is not water dependent.

The Doe Run Company mines and concentrates lead-bearing ore at the Brushy Creek Mine and Mill facility. Tailings from the mining operations are deposited in the existing tailings basin created by the Brushy Creek Tailings Dam (MO30951); however, the remaining tailings capacity is insufficient to support future mining and milling operations. This project includes the construction of a new tailings dam and tailings storage which will be located within the Lick Creek watershed, upstream of the existing Brushy Creek Mine Water Lake which receives water pumped from the mine.

The project would consist of a dam height of 183 feet, at elevation 1,230 feet above mean sea level (msl), and a maximum water surface elevation at 1,214 feet msl. The total designed storage volume of the facility is 24.1 million cubic yards of combined tailings and liquid. The proposed earth fill embankment is designed to meet requirements as an Environmental Class I dam and its construction would be completed in three phases. Phase I involves the construction of a 103-foot-high embankment to 1,150 feet above msl; Phase II would raise the embankment to 143 feet high, for a maximum elevation of 1,190 feet above msl; and Phase III would raise the



embankment to its final height of 183 feet at 1,230 feet above msl. Phase I dam construction would have a 5H:1V downstream slope. Phase II and III construction would take place downstream of Phase I construction with 4H:1V downstream slopes with approximately 100-ft-wide benches every 50 vertical feet.

The mine tailings dam is designed to contain storm and flood water for all storm events that could occur without passing flow, up to the 75% of the maximum probable precipitation (21.52 inches). Model results using a 6-hour duration indicate the Phase I dam emergency spillway will pass a flow of 3,241 cubic feet per second (cfs) and 1,416 acre-feet of water downstream to Bills Creek; Phase II dam emergency spillway would pass a flow of 2,752 cfs and 1,402 acre-feet of water downstream to Bills Creek; and Phase III would pass 2,186 cfs and 1,360 acre-feet of water downstream to Bills Creek. Construction of Phases II and III would occur at such times when Doe Run determines that the existing basin capacity is insufficient to support future operations.

Processing of currently identified proven and probable reserves, including reserves of minerals owned by the United States and leased by Doe Run, requires increasing tailings capacity for the Brushy Creek Mill. Raising the existing Brushy Creek Tailings Dam to increase tailings capacity is not technically feasible as the current dam height is at the maximum height of containment as controlled by the height of the ridges of the valley. To avoid placing tailings in drainage areas not currently containing mining waste, the location of the site for the new tailings dam was selected above the current Mine Water Pond.

Doe Run proposes to compensate for project impacts using on-site and off-site stream mitigation, on-site and off-site wetland mitigation, and/or credit purchases through the Missouri Stream Stewardship Trust Fund.

The location and general plan for the proposed work are shown on the enclosed sheets.

Water Quality Certification. By copy of this public notice, the applicant is requesting certification from the Missouri Department of Natural Resources that the operation of the proposed facility will apparently not violate the existing water quality criteria of the State of Missouri. The Commission hereby gives notice of its intent to certify this construction. A Corps of Engineers permit will not be issued until such certification has been granted. Commenters are requested to furnish a copy of their comments to the Missouri Department of Natural Resources.

Cultural Resources. A Corps staff archeologist will review topographic maps, the National Register of Historic Places, and other data on reported sites in the area. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area.

Endangered Species. Our preliminary determination is that the proposed activity will not affect listed Endangered Species or their critical habitat. A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies and constitutes a request to those

agencies for information on whether any listed or proposed-to-be-listed endangered or threatened species may be present in the area which would be affected by the proposed activity.

Flood Plain. We are providing copies of this notice to appropriate flood plain officials in accordance with 44 CFR Part 60 (Flood Plain Management Regulations Criteria for Land Management and Use) and Executive Order 11988 on Flood Plain Management.

Section 404(b)(1) Guidelines. The evaluation of activities to be authorized under this permit which involves the discharge of dredged or fill material will include application of guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. These guidelines are contained in 40 Code of Federal Regulations (CFR) 230.

Public Involvement. Any interested party is invited to submit to the above-listed POC written comments or objections relative to the proposed work on or before **May 6, 2014**. Substantive comments, both favorable and unfavorable, will be accepted and made a part of the record and will receive full consideration in determining whether this work would be in the public interest. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request in writing within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed for making a decision.

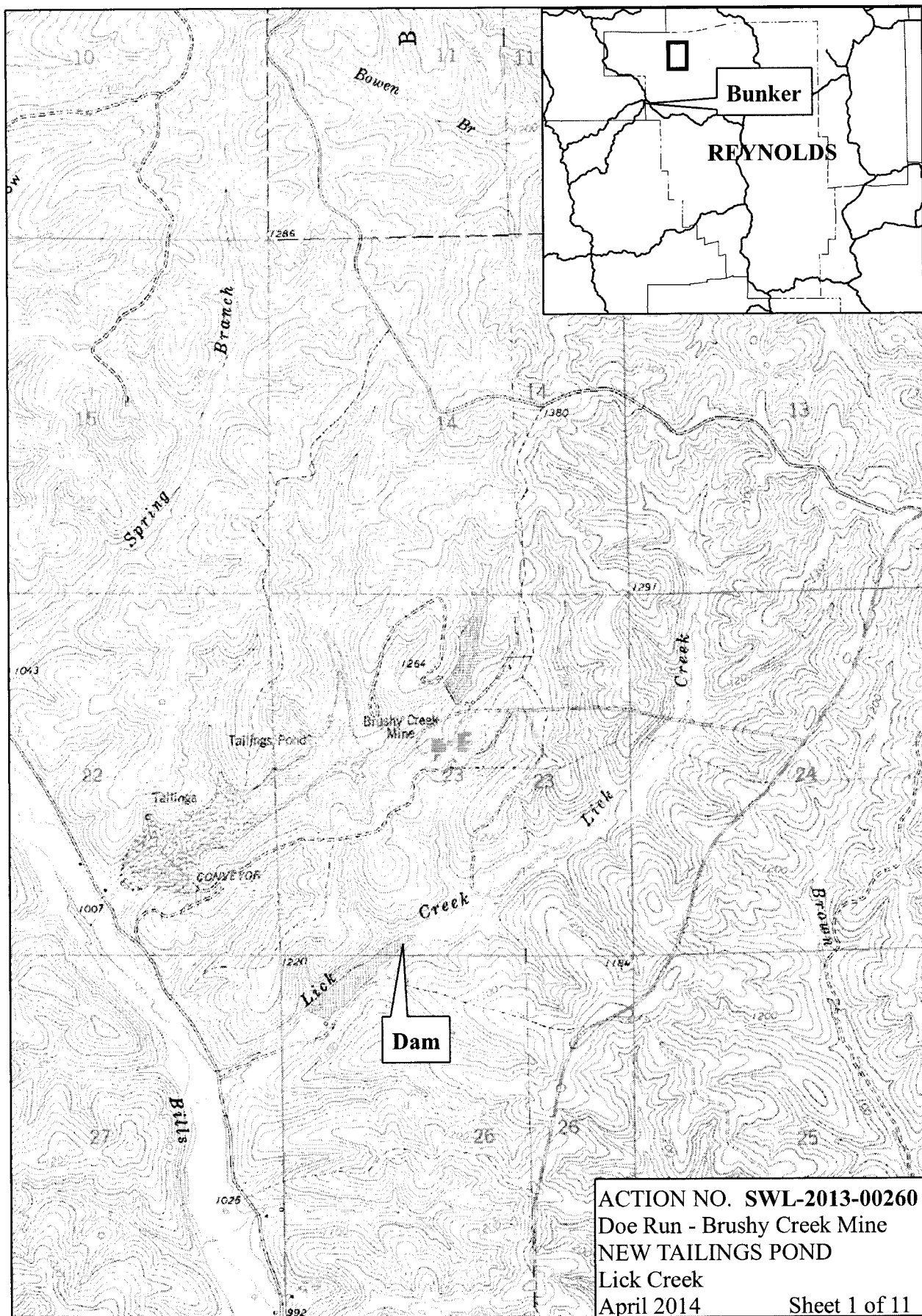
**NOTE:** The mailing list for this Public Notice is arranged by state and county(s) where the project is located, and also includes any addressees who have asked to receive copies of all public notices. Please discard notices that are not of interest to you. If you have no need for any of these notices, please advise us so that your name can be removed from the mailing list.

Enclosure

Approximate Coordinates of Project Center

Latitude: **37.53073°** Longitude: **-91.13142°**

UTM Zone: **15** North: **4155391** East: **665104**



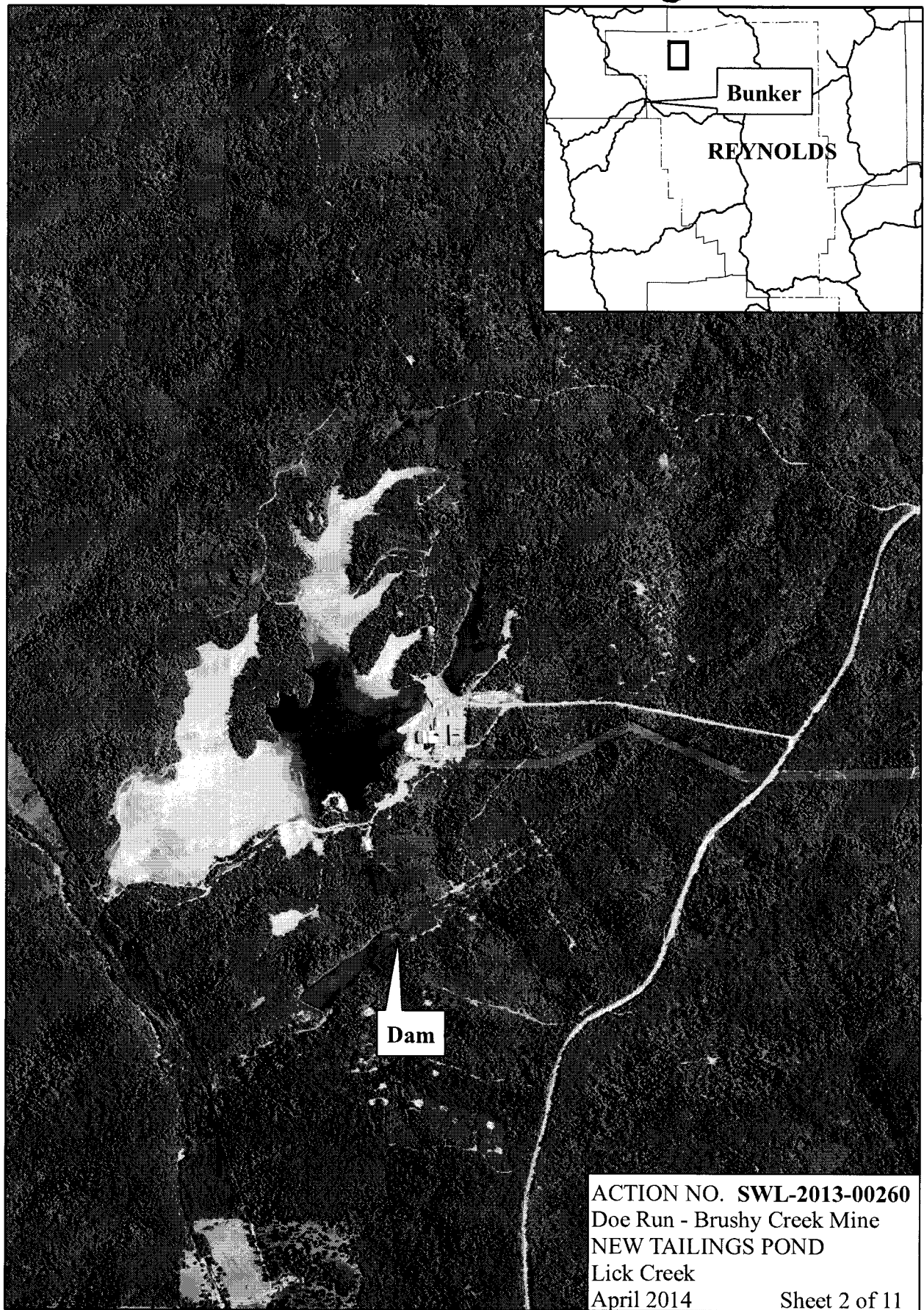
42

ACTION NO. SWL-2013-00260  
Doe Run - Brushy Creek Mine  
NEW TAILINGS POND  
Lick Creek  
April 2014

Sheet 1 of 11

5,600

Feet



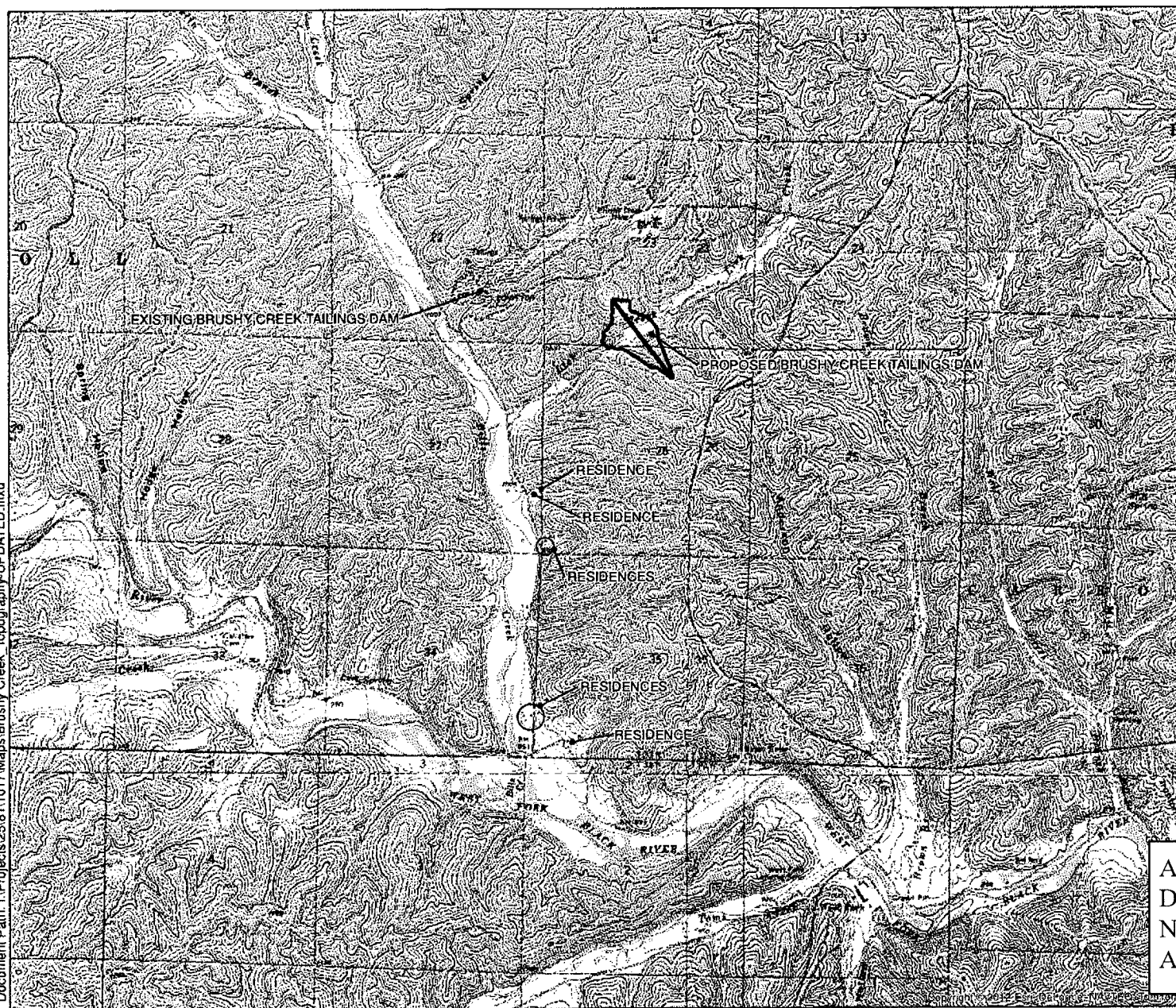
ACTION NO. SWL-2013-00260  
Doe Run - Brushy Creek Mine  
NEW TAILINGS POND  
Lick Creek  
April 2014

Sheet 2 of 11

5,600

Feet





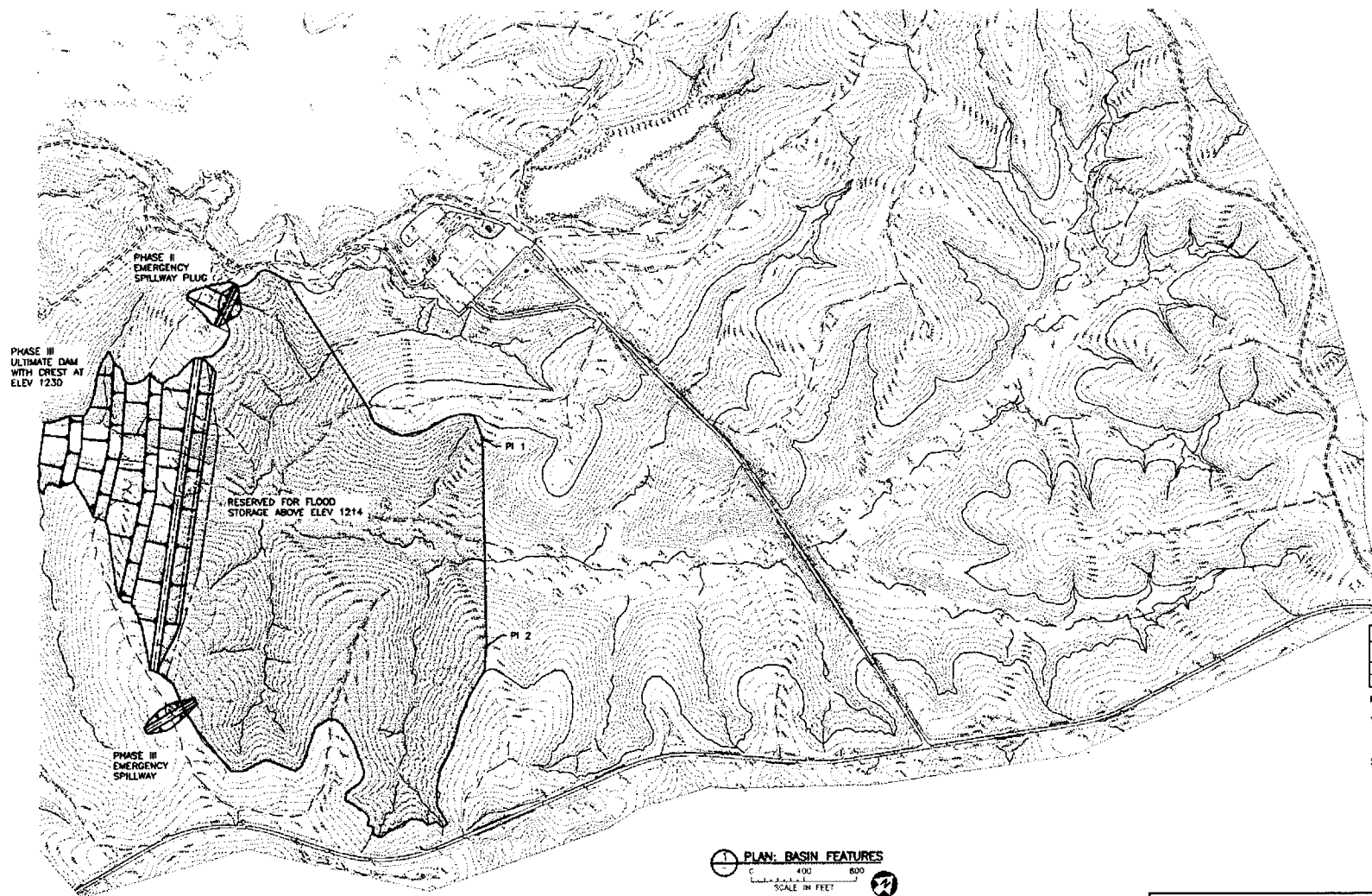
0 1,300 2,600 5,200 7,800 Feet



**ACTION NO. SWL-2013-00260**  
Doe Run - Brushy Creek Mine  
**NEW TAILINGS POND Lick Creek**  
April 2014 Sheet 3 of 11







HYDROLOGIC SUMMARY	
FEATURE - EVENT	WATER SURFACE ELEVATION
NORMAL	1214.0
100-YEAR	1219.6
SPILLWAY INVERT	1220.0
25% PMP	1226.5

NOTES:

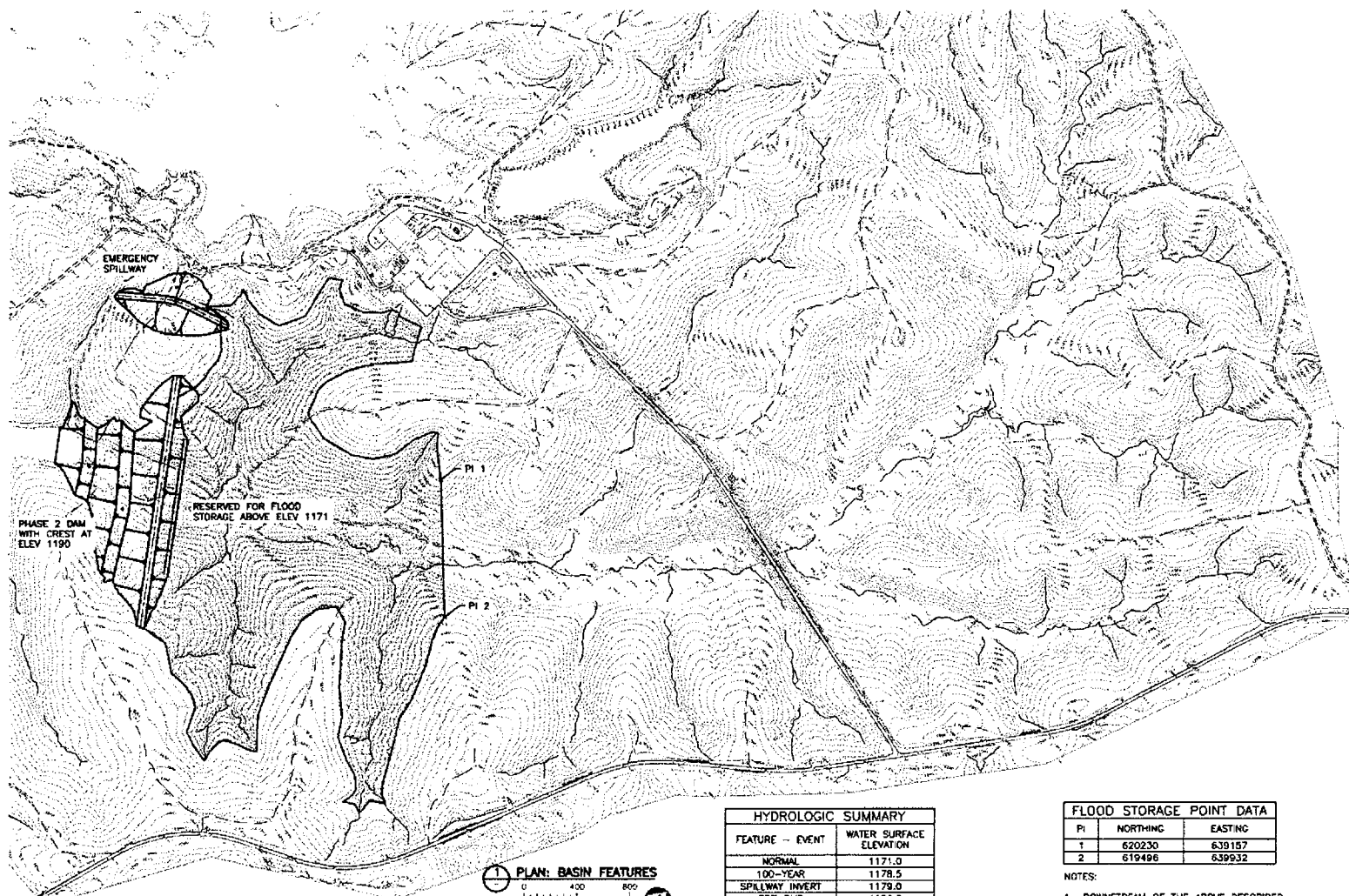
PI	NORTHING	EASTING
1	620473	639007
2	619348	640167

NOTES:

ACTION NO. **SWL-2013-00260**  
Doe Run - Brushy Creek Mine  
NEW TAILINGS POND Lick Creek  
April 2014 Sheet 6 of 11

[illegible]

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DATE: 11/13/2013 11:17:50, 2013, 11/13/2013 11:17:50, 11/13/2013 11:17:50



PLAN: BASIN FEATURES  
SCALE IN FEET  
0 400 800

HYDROLOGIC SUMMARY		
FEATURE -- EVENT	WATER SURFACE ELEVATION	
NORMAL	1171.0	
100-YEAR	1178.5	
SPILLWAY INVERT	1179.0	
75% PMP	1186.6	

FLOOD STORAGE POINT DATA		
PI	NORTHING	EASTING
1	620230	639157
2	619496	639932

NOTES:

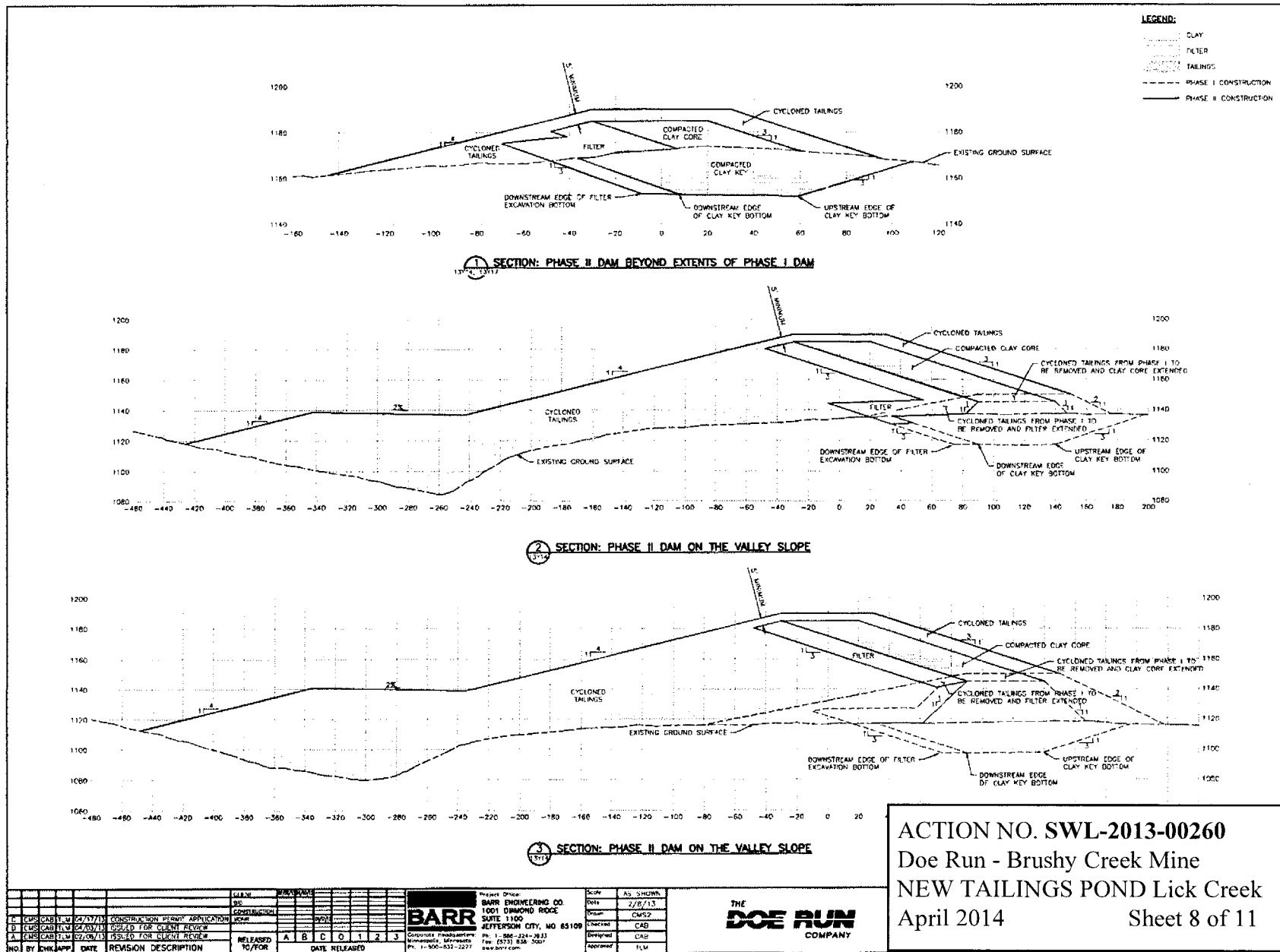
1. DOWNSTREAM OF THE ABOVE DESCRIBED LINE, THE FLOOD STORAGE BOUNDARY IS

- NOTES:
1. NORMAL LEVEL IS MAINTAINED BY P
  2. AVERAGE ANNUAL OUTLET FLOW IS
  3. OUTLET PUMP STATION MINIMUM CAP 8 CFS, TO PROVIDE CAPACITY TO D RESERVOIR AFTER FLOOD EVENTS.

**ACTION NO. SWL-2013-00260**  
**Doe Run - Brushy Creek Mine**  
**NEW TAILINGS POND Lick Creek**  
April 2014  
Sheet 5 of 11

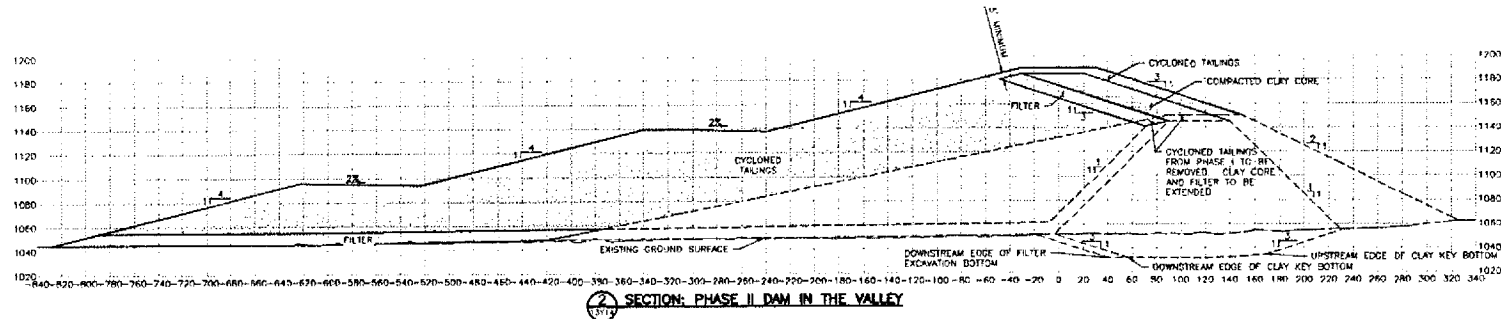
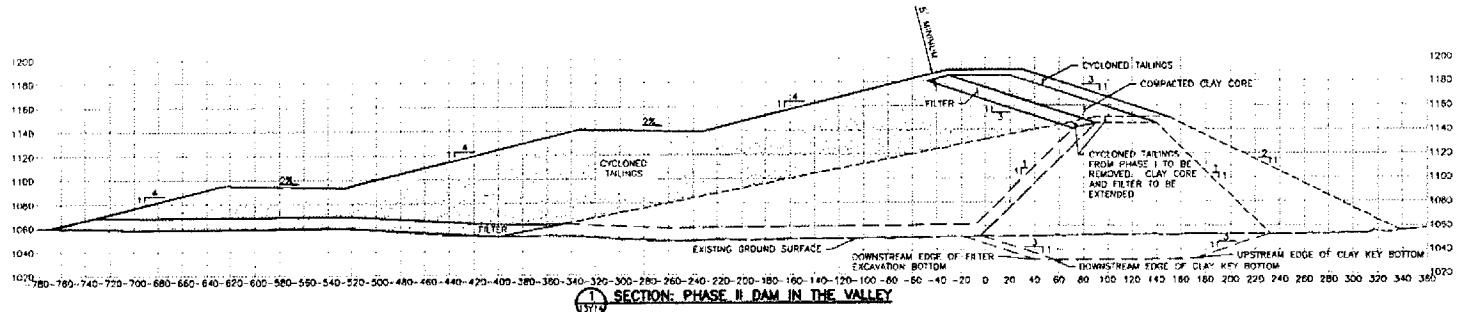
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CAUTION: This is a preliminary drawing. It is not to be used for construction without the approval of the engineer of record. The plan scale is 1" = 100' and the profile scale is 1" = 10'. The profile scale is 1" = 10'.

**LEGEND:**  
 CLAY  
 FILTER  
 TAILINGS  
 PHASE I CONSTRUCTION  
 PHASE II CONSTRUCTION



**ACTION NO. SWL-2013-00260**  
 Doe Run - Brushy Creek Mine  
 NEW TAILINGS POND Lick Creek  
 April 2014  
 Sheet 9 of 11

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION	RELEASED TO/FOR	DATE RELEASED
1	CMS	CAB	ELM	04/17/13	CONSTRUCTION REPORT APPLICATION		
2	CMS	CAB	ELM	06/03/13	ISSUED FOR CLIENT REVIEW		
3	CMS	CAB	ELM	07/08/13	ISSUED FOR CLIENT REVIEW		
4	CMS	CAB	ELM	07/08/13	ISSUED FOR CLIENT REVIEW		

**BARR**  
 Project Office:  
 BARR ENGINEERING CO.  
 1001 DIAMOND RIDGE  
 SUITE 1100  
 JEFFERSON CITY, MO 65109  
 Corporate Headquarters:  
 Minneapolis, Minnesota  
 Tel: 1-800-832-2277  
 Fax: (612) 638-9201  
 www.barr.com

**THE**  
**DOE RUN**  
 COMPANY

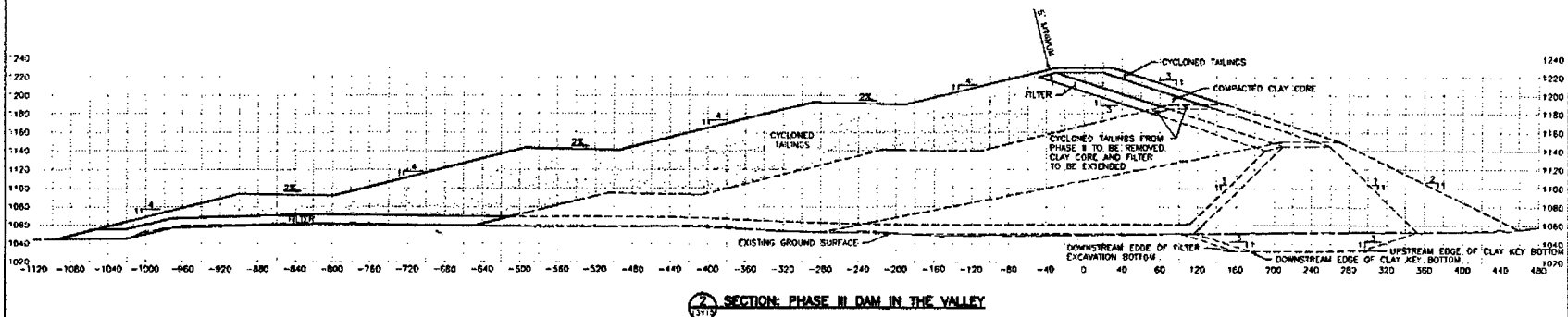
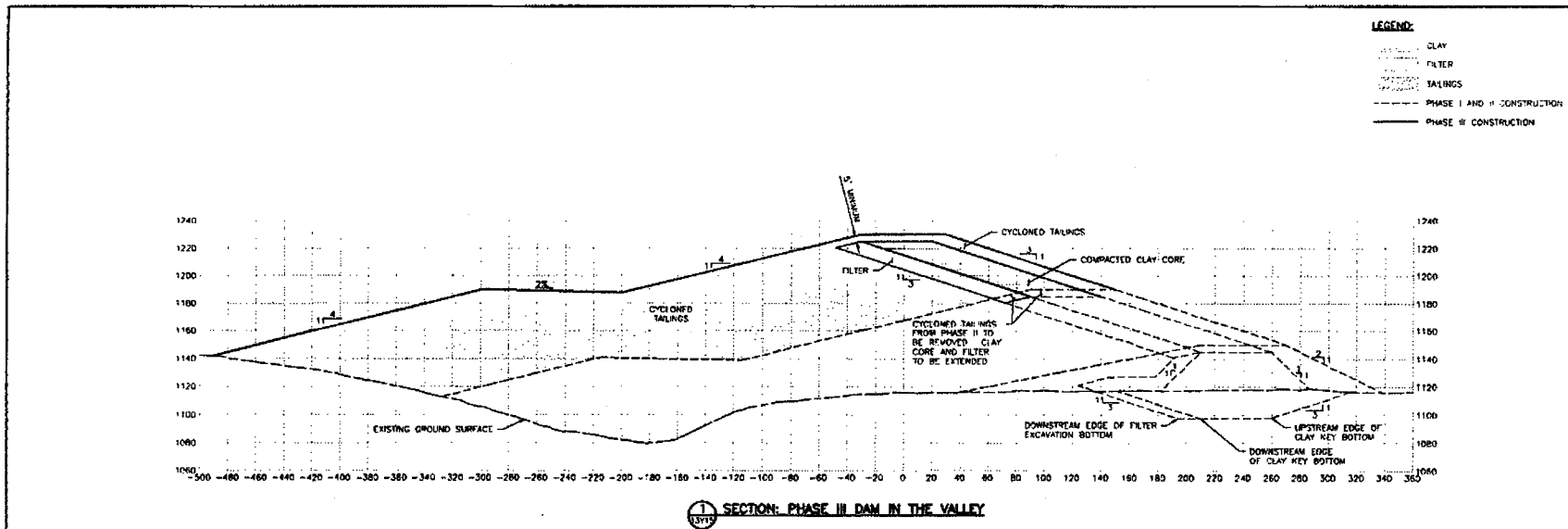
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 Date: 2/8/13  
 Drawn: CMS  
 Checked: CAB  
 Designed: CAB  
 Reported: ELM

CAD: JUNE, DOE, H. REVISED FILE: M:\DOE\SWL-2013-00260\SWL-2013-00260.dwg PLOT DATE: 4/17/2013 4:13 PM





CADD USER: CDR-H N. SHAW FILE: H:\SWL\DOE\SWL-2013-00260\11-DOE RUN - BRUSHY CREEK MINE - LICK CREEK NEW TAILINGS POND.dwg DATE: 4/17/2014 1:17 PM



**ACTION NO. SWL-2013-00260**  
**Doe Run - Brushy Creek Mine**  
**NEW TAILINGS POND Lick Creek**  
**April 2014** **Sheet 11 of 11**

DESIGNED BY	DATE	REVISION	DESCRIPTION	DATE RELEASED
1	4/17/14	1	ISSUED FOR PERMIT APPLICATION	
2	4/17/14	2	ISSUED FOR CLIENT REVIEW	
3	4/17/14	3	ISSUED FOR CLIENT REVIEW	
4	4/17/14	4	ISSUED FOR CLIENT REVIEW	
5	4/17/14	5	ISSUED FOR CLIENT REVIEW	
6	4/17/14	6	ISSUED FOR CLIENT REVIEW	
7	4/17/14	7	ISSUED FOR CLIENT REVIEW	
8	4/17/14	8	ISSUED FOR CLIENT REVIEW	
9	4/17/14	9	ISSUED FOR CLIENT REVIEW	
10	4/17/14	10	ISSUED FOR CLIENT REVIEW	
11	4/17/14	11	ISSUED FOR CLIENT REVIEW	
12	4/17/14	12	ISSUED FOR CLIENT REVIEW	
13	4/17/14	13	ISSUED FOR CLIENT REVIEW	
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51	4/17/14	51	ISSUED FOR CLIENT REVIEW	
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99	4/17/14	99	ISSUED FOR CLIENT REVIEW	
100	4/17/14	100	ISSUED FOR CLIENT REVIEW	

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